

REMARKS

Entry of this Amendment under 37 C.F.R. §1.116 is respectfully requested because it places the application in condition for allowance. Alternately, entry is requested because it places the application in better form for appeal. No new matter is believed to be added to the application by this amendment.

Finality of Office Action

The Office Action mailed December 31, 2003 includes a rejection based upon the newly cited reference of Kunsman (U.S. Patent 6,412,824), which was newly cited in the PTO-892 form appended in the Office Action. As a result, the Examiner has placed the application under final rejection before a clear issue has been developed between the Examiner and the applicants. See MPEP 706.07.

The Examiner is accordingly respectfully requested to consider the application under non-final rejection.

Status of the Claims

Claims 1, 4, 5 and 8 are pending in the application. Claims 2, 3, 6, 7, and 9-12 are cancelled. Support for the amendments to claim 1 can be found at page 4, lines 19-20 of the specification.

Rejection Under 35 U.S.C. §103(a) Over Kunsman and Katz (paragraphs 1 and 2 of the Office Action)

Claims 1, 4, 5, and 8 are rejected under 35 U.S.C. §103(a) as being obvious over newly applied Kunsman (U.S. Patent 6,412,824) in view of Katz (U.S. Patent 5,577,529). Applicants traverse.

The Present Invention and its Advantages

The present invention pertains to an electrofusion joint. During an electrofusion welding process, the searing surface of the saddle portion must remain in close contact the outer circumferential surface of the main pipe. Otherwise, bubbles may form in the fusion welding interface during the electrofusion welding process, or the heating wires may move and contact each other to cause a short circuit.

An important aspect of the present invention lies in that the close contact to a main pipe is improved by increasing the flexure of the collar portion. A typical embodiment of the invention finds expression in instant claim 1, which sets forth:

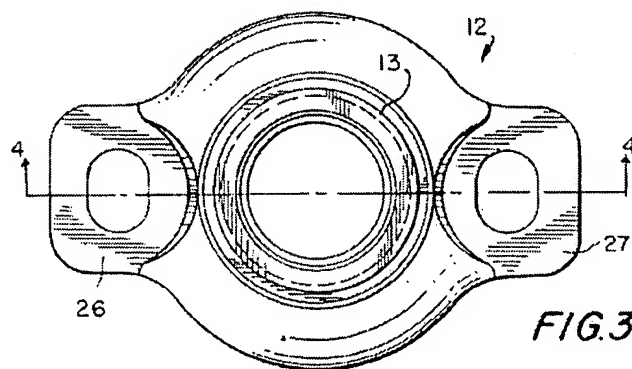
1. An electrofusion joint made of a thermoplastic resin comprising:
 - a saddle portion provided with heating wires embedded in its seating surface to be joined to an outer circumferential surface of a resin pipe;
 - a spigot projecting from said saddle portion or projecting in a lateral direction from a trunk portion projecting from said saddle portion and to which a branch pipe is to be connected; and
 - collar portions formed on both sides of said saddle portion so that a latch of a clamping device can be engaged; wherein a recess is formed

only on a collar portion side in an entire circumference of a base of the spigot or the trunk portion projecting from said saddle portion.

The invention produces the advantageous effect of increasing deflection by lengthening the length of the collar portion without spoiling the strength of the bases of the spigot or trunk portion.

Distinctions of the Invention Over Kunsman and Katz

Kunsman pertains to a pipe branch fitting for fitting a branch pipe to a main pipe using a gasket (see Abstract of Kunsman). The Examiner turns to Figure 3 of Kunsman, which shows a lower face of a pipe with an arcuate section 12, with an outwardly extending outlet portion 13 and bolt pads 26 and 27. Figure 3 of Kunsman is reproduced below.



In the paragraph 2 of the Office Action, the Examiner calls the bolt pads 26 and 27 “collar portions” and asserts that they form a recess. However, Kunsman discloses bolt pads 26 and 27, and these bolt pads are recessed as shown in Figure 3 of Kunsman.

However, the bolt pads 26 and 27 of Kunsman are to receive nuts 34 to bolts 33 to secure a gasket 50. That is, the recess of Kunsman does not aim at increasing the flexure of the bolt pads 26 and 27. Further, since the joint disclosed by Kunsman is not an electrofusion joint, Kunsman fails to supply any technical ideas pertaining to increasing the flexure of bolt pads 26 and 27. This flexure, which Kunsman lacks, is one of the important features of the present invention.

Kunsman therefore pertains to a mechanical gasket fitting and teaches nothing pertaining to electrofusion technology (which requires no gasket).

Also, the Examiner asserts that Kunsman pertains to a “resin pipe.” However, Kunsman at column 4, lines 10-13 discusses “metal castings, for example, castings of malleable iron, ductile iron, aluminum or brass would be satisfactory, but also other materials could be used including plastic moldings.” That is, Kunsman may mention plastic but fails to disclose any technology pertaining to electrofusion joints.

Kunsman is therefore non-analogous art.

The Examiner admits that Kunsman fails to disclose embedded heating wires. The Examiner then turns to Katz for teachings pertaining to heating wires embedded in a plastic pipe. The Examiner fails to provide any motivation for one to place electric heating wires in a mechanical gasket seal assembly such as Kunsman's. Katz additionally fails to address the deficiencies of Kunsman in suggesting a claimed embodiment of the invention.

As a result, one having ordinary skill would not be motivated by Kunsman and Katz to produce the invention embodied in claim 1. A *prima facie* case of obviousness has thus not been made. Claims dependent upon claim 1 are patentable for at least the above reasons.

This rejection is accordingly overcome and withdrawal thereof is respectfully requested.

Information Disclosure Statement

Applicants thank the Examiner for considering the Information Disclosure Statement filed November 22, 2002 and for making the initialed PTO-1449 Form of record in the application in the Office Action mailed January 29, 2003.

Art Cited But Not Utilized By The Examiner

The art cited but not utilized by the Examiner shows the status of the conventional art that the invention supercedes. No additional remarks are accordingly necessary.

Foreign Priority

The Examiner has acknowledged foreign priority most recently in the Office Action mailed July 15, 2003.

Drawing Correction

The Examiner has approved the proposed drawing correction in the Office Action mailed July 15, 2003.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert E. Goozner, Ph.D. (Reg. No. 42,593) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

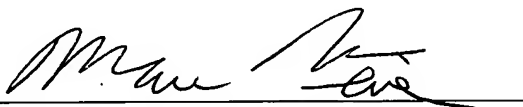
Amendment of March 31, 2004
Response to Office Action dated December 31, 2003

Appl. No. 10/067,853
Group: 3679

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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